

REMARKS

Figure 1 was objected to because it did not contain the legend "Prior Art". A Replacement Sheet containing a Figure 1 with the legend "Prior Art" accompanies this Response. Approval of the Replacement Sheet is requested.

Claim 12 was rejected under 35 U.S.C. § 112, first paragraph. That claim has been canceled and the rejection is therefore moot.

Several of the claims were rejected under 35 U.S.C. § 112, second paragraph. Those claims have been amended in a manner so that the rejection is now moot. Withdrawal of the rejection is requested.

All the claims were rejected as being unpatentable over one of Harrison, Dew (WO 02/42504), or Burke (US 6,309,547). Applicants respectfully traverse.

With respect to Harrison, it teaches a differential separation of a leached slurry of sulphidic ore where the sulphidic ore, other non-biological solids, as well as the free and attached bacteria. Harrison finds that the recovery of the bacteria activity was directly related to the solid mass recovery (page 533, Fig. 4, page 534). Harrison points out that this finding agrees with previous observations that most of the bacterial population is associated with the solid phase (*Id.*). Put another way, Harrison teaches a process that differs from that in the present claims. Harrison teaches a process to separate solids in a slurry from a supernatant with the hope that the bacteria in the solids can be recycled.

Harrison, however, does not teach or suggest a process where a leach slurry is subjected to a solid liquid separation with the supernatant being further subjected to a process where the microbial cells (bacteria) are separated from metal in the

In the Drawings:

Please replace current Figure 1 with the attached Figure 1 (indicated as a Replacement Sheet). The change to Figure 1 is that it now contains the legend "Prior Art".

supernatant. In fact, Harrison is completely silent about any further processing of any supernatant resulting from the hydrocyclones. Accordingly, Harrison cannot teach or suggest the presently claimed process.

With respect to Dew, this publication is not appropriate prior art under 35 U.S.C. § 103(c). The subject application claims priority to PCT/ZA02/00110 (having a filing date of July 4, 2002), which in turn claims priority to ZA 2001/5817 (having a filing date of July 16, 2001). The priority documents are enclosed. The cited reference was published May 30, 2002, which is after the filing date of ZA 2001/5817. Thus, the cited reference can be prior art only under 35 U.S.C. § 102(e). At the time of the present invention, however, each of the present invention and the cited reference were commonly owned by Billiton SA Limited. As evidence of such common ownership, Applicants attach an Assignment for each of PCT/ZA02/00110 and ZA 2001/5817 as well as to PCT ZA01/00183 and ZA 2000/5980. Accordingly, Applicants request withdrawal of the rejection.

As for Burke, admittedly it teaches a process where anaerobic bacteria is used to convert biodegradable organic material to soluble and gaseous products and then the non-biodegradable organic material is separated from biodegradable organic material, anaerobic bacteria and dissolved inorganic material. Burke also teaches that the biodegradable organic material may be wholly or partially digested. In addition, Burke teaches that the biodegradable material and the anaerobic bacteria may be separated from the soluble products.

Burke, however, does not teach a process where the supernatant from a solid/liquid separation contains bacteria that is then subsequently separated from the

supernatant. Instead, Burke teaches a process where the supernatant is returned to the reactor. Furthermore, there is nothing in Burke or the other cited references to suggest or teach the desirability of separating the bacteria from the supernatant. Therefore, withdrawal of the rejection is requested.

Applicants believe that all the claims are in condition to be allowed and respectfully request the same. If, for any reason, the Examiner feels that the above amendments and remarks do not put the claims in condition for allowance, the undersigned attorney can be reached at (312) 321-4276 to resolve any remaining issues.

Date: April 27, 2005

A handwritten signature in black ink, appearing to read "G. Peter Nichols", written over a horizontal line.

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